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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,257	09/16/2003	Wolfgang Beilfuss	Serie 6059	2873

7590 02/12/2008
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EXAMINER

HAGOPIAN, CASEY SHEA

ART UNIT	PAPER NUMBER
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1615

MAIL DATE	DELIVERY MODE
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02/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/663,257

Applicant(s)

BEILFUSS ET AL.

Examiner

CASEY HAGOPIAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-25,30-48,57 and 58 is/are pending in the application.
- 4a) Of the above claim(s) 22,24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-21,23,30-48,57 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

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DETAILED ACTION

Receipt is acknowledged of applicant's Amendment/Remarks filed 11/26/2007.

Claims 18, 20, 24, 25, 31-35, 38, and 39 are currently amended. Claims 18-25, 30-48, 57 and 58 are pending. Claims 22 and 25 were previously withdrawn.

Election/Restrictions

Newly amended claim 24 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the elected species, urea, has been removed from the claim leaving only non-elected species. Therefore, the claim is no longer drawn to elected subject matter.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 24 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Thus, claims 18-21, 23, 30-48, 57 and 58 are currently under consideration.

This application contains claims drawn to an invention nonelected with traverse in the reply filed on 4/12/2007. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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MAINTAINED REJECTIONS

The following rejections have been maintained from the previous Office Action dated 7/24/2007:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 18-21, 23, 30-48, 57 and 58 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (USPN 7,078,005 B2) over Beilfuss et al. (US 2001/0021711 A1). Smith teaches an H₂S-scavenger product comprising (a) a reaction product derivable by reaction of a carbonyl group-containing compound with an alcohol, thiol, amide, thioamide, urea or thiourea, said alcohol, thiol, amide, thioamide, urea, thiourea having no amine function, and (b) an amine (col. 6, lines 50-56). Smith further teaches examples of amines including a bisoxazolidine such as N,N'-methylene-bisoxazolidine (col. 6, lines 16-24). Smith teaches utilizing a solvent including glycol, ethanol and mixtures thereof as well as water to dissolve the reaction product (col. 5, lines 49-55). Said solvent reads on the "at least one additional additive" as claimed in instant claim 30. Smith further teaches that the solvent is in concentrations from 10 to 95% by weight and the H₂S-scavenger product comprises at least 10% by weight of the reaction product (col. 5, lines 57-61). Said percentages read on the ratios claimed in the instant claims 32-35 and 37. Smith also teaches the use of water-free solvents as well as the H₂S-scavenger product being substantially water-free (col. 5, line 7; claim 21). Said teachings read on "anhydrous" as claimed in the instant claim 40 as well as the percentages claimed in instant claims 38 and 39 because "0%" is within the claimed percentages of "up to about 5%" and "up to about 1%".

It is be noted that the instant claims are product claims and any intended use recitation such as "preservative" (all claims) or "is utilized for..." (claims 57 and 58) does not alone show patentable distinction. A recitation of intended use of the claimed invention must result in a structural difference between the claimed invention and the

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prior art in order to patentably distinguish the claimed invention from the prior art. In other words, if the prior art structure is capable of performing the intended use, then it meets the claim.

It is also noted that Smith is silent to the particular limitation, “substantially absent of an iodopropynyl compound and a derivative of 1H-benzimidazol-2-carbamic acid”, however the mere absence of said iodopropynyl compound and derivative of 1H-benzimidazol-2-carbamic acid fulfills said limitation.

Smith is silent to the particular N,N'-methylene-bisoxazolidine, N,N'-methylenebis(5-methyloxazolidine). Beilfuss teaches bactericidal and fungicidal liquid preparations for industrial products comprising at least one bactericidal N-formal (title; abstract). Beilfuss teaches particular N-formals including amines such as oxazolidines (e.g. 5-methyloxazolidine and monoethanolamine) (paragraph 0018). Beilfuss also teaches the particular N-formal, 3,3'-(methylenebis (5-methyloxazolidine) is preferred (paragraph 0019). One of ordinary skill in the art would have been motivated to include the particular N-formal 3,3'-(methylenebis (5-methyloxazolidine) because of its known bactericidal properties and its effectiveness in industrial products. A practitioner would reasonably expect the incorporation of 3,3'-(methylenebis (5-methyloxazolidine) in the composition advanced by Smith would produce a H₂S-scavenger and/or a bactericidal composition. Thus, in Smith it would have been obvious at the time the invention was made to include the particular N,N'-methylene-bisoxazolidine, 3,3'-(methylenebis(5-methyloxazolidine) as suggested by Beilfuss.

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Smith is teaches solvents including ethanol, glycol and mixtures thereof but is silent to the particular solvent, phenoxyethanol. Beilfuss also teaches the addition of solvents including alcohols, glycols and mixtures thereof and preferably phenoxyethanol (paragraph 0023). One of ordinary skill in the art would have been motivated to include the particular solvent, phenoxyethanol because both Smith and Beilfuss teach equivalent solvents that can be interchangeable for similar active agents. Absent of unexpected results, a practitioner would have reasonably expected a composition comprising solvent compatible with 3,3'-(methylenebis (5-methyloxazolidine). Thus, in Smith it would have been obvious to one of ordinary skill in the art at the time the invention was made to include phenoxyethanol as suggested by Beilfuss.

Smith is silent to the particular percentage ranges claimed in the instant claims 41-48, however it would be within the knowledge of one skilled in the art to optimize a composition by way of routine experimentation. Additionally, Beilfuss teaches active ingredient percentages of >50%, preferably >65%, and in particular >75% and accordingly, the solvent percentages are <50%, preferably <35%, and in particular <25% (paragraph 0023). Beilfuss also teaches particular percentages of the N-formals being form 1 to 99%, preferably 10 to 95%, more preferably 20 to 90%, and in particular 40 to 90% (paragraph 0018). Absent of unexpected results, a practitioner would have reasonably expected an optimized composition comprising 3,3'-(methylenebis(5-methyloxazolidine), urea and, if necessary, phenoxyethanol in the percentages claimed. Thus, in Smith it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the particular percentages claimed by applicant.

Double Patenting

Applicant is advised that should claim 19 be found allowable, claim 20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Response to Arguments

Applicant's amendment renders the objection of claims 18 and 20 moot. Thus, the objection has been withdrawn.

Applicant's amendment renders the rejections of claims 24, 31-35, 38 and 38 under 35 USC 112, 2nd paragraph moot. Thus, said rejections have been withdrawn.

Applicant's arguments with respect to the rejection under 35 USC 103 over the combination of Smith and Beilfuss have been fully considered but they are not persuasive. Applicant argues that the references fail to teach the combination of at least one formal and urea because Smith teaches urea is a reactant used to form a reaction product, and the reaction product or products, not urea, is combined with the amine, e.g., N'-methylene-bisoxazolidine (pages 10-11 of Remarks). In response, it is

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respectfully submitted that applicant's claim language is open-ended and does not exclude a reactionary product utilizing urea or a urea derivative. It is applicant's burden to show that the completed reaction does not result in the presence of any urea (i.e., 0.0%). The "comprising" language in applicant's claims allows for other components to be included regardless of their material effect on the composition. The combination of Smith and Beilfuss reads on the claims as currently written. Thus, applicant's argument is unpersuasive. The rejection under 35 USC 103 over the combination of Smith and Beilfuss is maintained.

Applicant's amendment renders the Double Patenting rejections over USPN's 6,355,679 and 6,469,060 moot. Accordingly, said Double Patenting rejections have been withdrawn.

It is noted that applicant did not acknowledge the duplicative nature of claims 19 and 20 in the Response dated 11/26/2007, thus the warning of a Double Patenting objection remains included in *this* Office Action (see Maintained Rejections).

Conclusion

All claims have been rejected; no claims are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Casey Hagopian whose telephone number is 571-272-6097. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carlos Azpuru, can be reached at 571-272-0588. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Casey Hagopian/
Examiner, Art Unit 1615

/Carlos A. Azpuru/
Primary Examiner, Art Unit 1615